GARTEL: Peer. I have known you for 40-years. That is a lifetime ago. What was your entrance into Digital Media?

Peer: In 1979 I had the opportunity to work together with electronic designer David Jones on hand building a digital video frame buffer. It took 2 months or so to have the basic A to D and D to A boards up and running. Using an ELF 2 microcomputer we were able to control an ALU (arithmetic logic unit) chip. We were able to send video through the boards in real time and change the order of the grey tonal range. We even figured out that color, video subcarrier 3.58 mhz, could be added to the video, tint it, then flipping the bits, that is the tonal range we could discover rich luscious color combinations. We were knocked out by what we saw. I have to give David credit for the engineering chops. I threw out possible ideas, directions. He said it would be easy. I wouldn't say it was easy but it was doable. David taught me what to do. I would solder and wire the boards and racks. I have made many wonderful recordings with that digital video buffer.

Sometime in 1977, I got to play with Don McArthur's S.A.I.D. Spatial and Intensity Digitizer, a prototype of his that was at the Experimental Television Center. A live video image could be run through it. I did things you can do in Premiere or Vizzie with Ableton Live now. I made some recordings with it. I was recording the video on to ½" reel to reel tape. Wow. I am very fond of the piece "100 Sec. Luminations" I made with it.

GARTEL: I know you had a father that that was "an inventor" and did phenomenal things? What was it like to have that as a background? How was it to have such a kind of person as a Dad?

Peer: My father, Harald Bode, was one of the pioneers of electronic music instrument making. Dr. Tom Rhea of the Berklee School of Music wrote that he made significant contributions in three separate eras of electronic music instrument design, from the mid 1930 to the late 1980's. He designed and developed some 17 electronic instruments, including the Warbo organ, the Melochord, the Melodium, the Polychord, the Bode Ringmodulator, Bode Frequency Shifter, Bode Vocoder and the Bode Barberpole Phaser. Caspar Abocab in Berlin produced two hour long Radio Dramas for German National Radio on my father's work and music. Emil Schult, connected to the German Techno band Kraftwerk told me after seeing a 1972 video of Harald's home studio that he had possibly the most advanced electronic performance studio at that time, worldwide. That studio was below my bedroom, in a suburban home north of Buffalo, NY. I heard my father making recordings on a regular basis my whole young life. My father was a very kind and generous person. He worked his day job as an electronic engineer at Estey Organ company and at Wurlitzer and later Bell Aerospace companies. When he came home he would eat some, nap and then put in several ours working in his home workshop and studio. He had what I now realize was a serious work ethic. He experienced the 1920's depression and with my mother and brother the second world war in Germany. As he would say after he came to the states with our family in 1954, he was never hungry again. My father loved music and he loved designing and building electronic music instruments. The day after he passed away I found 50 years of his notebooks, 50 years of imagining the making of new sounds. I know my own making work over a long time span is connected to his example. My brother Ralf, 11 years older than I, was a successful and significant cinematographer for feature films. He made a remarkable body of work first in NY and then in LA. Early on Ralf was the second camera unit for the 1975 movie "Rocky". He was the cinematographer for the 1977 film "Saturday Night Fever". In 1977 my father released his Bode Vocoder, that was also released as the Moog Vocoder. During those years I was artist in resident at the Experimental Television Center in Binghamton and then Owego, NY. I was making and showing my videos, "Blue", "Ring Modulation", "100 Second Lumination" and also together with Meryl Blackman, David Jones and the ETC producing "Movements for Video Dance and Music" a live video performance installation event at the Herbert F Johnson Museum in Ithaca, NY and the Everson Museum in Syracuse, NY. Those performances included Bill T. Jones, Arnie Zane, Cara Brownell, Charlie Seltzer and Bob Warren.

GARTEL: I find your early work to be extraordinary (Of course.) When you look at it today.....What do you see?

Peer: I am excited to see my early recordings. I always thought of them as collaborations with remarkable electronic tools and remarkable ideas. They have maybe even gotten more interesting over time. Just a few years ago I together with my partner Rebekkah Palov transferred a number of early pieces from the ¾" video tapes to digital form. They are now distributed and available. I have approximately 100 early 1972-78 ½ " reel to reel tapes I hope to transfer. We just had the Mercer Media transfer some 1976 tapes including the documentation and feed tapes for the "Movements for Video, Dance and Music". The videos look beautiful. I am thinking about what new performance installation to carry out with the videos. The early tapes I thought of as a project I called the "Process Tapes". I am still intrigued by those recordings. I have been performing with them using a Midi guitar set up where I can control the speed and direction of video files with the guitar. I am not done with those pieces yet.

GARTEL: I know the above question is more philosophical than hands-on, what do you see as the difference between making Electronic Art then as opposed to making it now?

Peer: We all wonder about the differences between electronic arts early on and now. One answer is to look at the early work and look at the work now. There are many more opportunities to make work in electronic arts now. The tool set has grown and diversified. There is so much more information available out there. If I had to start again now, it would be very interesting. Early on we were excited and amazed by what we were seeing regarding electronic arts. The scenes were smaller. We had a sense we knew roughly who was doing what. The tools coming together were breakthroughs. Also there was so much creative art activities in so many different mediums and venues. The critical thinking was also extensive and varied. The atmosphere was one of across the board creative research. We were all looking and listening to a lot of new work. Peter Wollen wrote an essays on the two Avant Grades, the commercial avant garde and the Coop avant-garde. The distinction was a useful one. We were trying to understand what arena we were developing. The commercial sector had an amazingly talented artist pool, excellent equipment and financial resources. The commercial avant garde's Other, the Co-op, the

experimental, the New Music, the New American Cinema, the new media artists, the independent artists, etc ...were exploding with creativity and breakthroughs, working in a way that the commercial system could just not afford to work. Anthony Braxton has a nice vocabulary to capture the some of the difference. He referred to the restructuralists, the stylists and the tradionalsts. The restructuralist made basic discoveries and inventions, the stylists were able to deliver these new configurations to a wider public, the traditionalists protected and moved forward the developments of the past. These distinctions are useful now in our present and emerging moment. I still use some of the original tools and videos that I worked on in the 70's. Rich stuff. Interestingly, David Jones is making a new generation of Euro Standard rack video and sound processing tools. Some ideas are able to keep moving forward.

GARTEL: Nam June Paik's words were so important in the past, do you think they have relevance today? If so...Why?

Peer: I think of Nam June Paik in one way or another every day. He is the philosophical media artist shaman, using our electronic technologies to help heal the culture. His extensive thinking and humor has lasted well beyond his own life. I love watching his video pieces, the right mix of wonder and criticism and irony to allow one to remain steadfast and human. His book catalog, "Global Groove 2004" to celebrate his Global Groove installation, was based on the 1972 "Global Groove" video television piece shown on PBS. The catalog book is most remarkable. It is the catalog for the installation as well as a reproduction of his first retrospective exhibition catalog "Nam June Paik: Videa'n' Videology 1959-1973" at the Everson Museum in Syracuse, NY. The original catalog is out of print and very expensive. It has been reprinted with the help of Stephen Vitiello. Fortunately the new Global Groove catalog is very inexpensive. I have probably purchased 30 copies or so over the years to give as gifts and to replenish my own supply when the books I lend out don't always come back. The book is brilliant, inspiring and fun.

Nam June Paik is part of a fairly large group of 20th and 21th century media artists who are phenomenal in regards to their thinking and production. They are like a parallel pro human pro living universe. Music composers and performers, filmmakers, electronic media makers, dancers, writers, creative artists ... put it together and you have a monster of positive human energies.

GARTEL: "Old is new" so gazing at your works today, I find it totally mesmerizing. I would not use that term with Renaissance Art thought I find that more romantic. What words would you choose to represent Digital Media aesthetically?

Peer: The language around media arts works is as experimental and inventive as the works. I like Alain Badiou's ideas, those that I understand, of the complexities of systems, the continuation of histories, the human events that make changes in the world. I have always felt drawn to and challenged by ideas and thinking. In the beginning of my work, the beginning of thinking of myself as an artist, I was interested in phenomenology, experience and the body. I

was making films and videos and also taking dance classes and performing. I experienced the strong linguistic shift that took place in the 60's and 70's. Writings in semiotics and structuralism, meaning systems, denotative and connotative systems of meaning making were being written and translated into English. I also was taken by the ideas of, for example, Hollis Frampton and Tony Conrad, the Vasulkas, concerning Open Systems, set theory, event structures, the attending to the signal. The experimental filmmakers were deep into moving image and moving thinking. I studied with Larry Gottheim, Ken Jacobs, Peter Kubelka, Nicholas Ray and Ralph Hocking in Binghamton and Gerry O'Grady, Hollis Frampton, Paul Sharits, Tony Conrad, Woody and Steina Vasulka in Buffalo. They were making unprecedented media work moving faster than the writers. Melissa Ragona has written some excellent texts on media artists and their work. See the Hollis Frampton text "Hidden Noise". I have a library of books. The media arts work of the 20th and 21st century are historical breakthroughs. The new media electronic forms are, in fact, how the configuration of media work will come to be understood and disseminated. The digital humanities, library science are setting the stage for our next ways of reflecting on our humanity and accomplishments.

GARTEL: Part of the beauty of your location, is your proximity to E.T.C. and your ability to utilize older technology. Does that comfort you in many ways? I for one must say when I came back to E.T.C. and Alfred I felt so "at home" with the old equipment. Do you think once again that old technology has its value in such a fast paced cell-phone world?

Peer: I have lived in upstate New York in one location of another for most of my life, the Buffalo area, Binghamton, Owego, Alfred, Hornell. I have been in Alfred, Hornell since 1987. I have been so fortunate to be 100 miles from the Experimental Television Center in Owego and now Signal Culture in Owego, NY and the Institute for Electronic Arts in Alfred and the Burchfield Penny and Squeaky Wheel in Buffalo. Upstate New York has a rich, long and deep history of new media nurturing and development. From Buffalo, crisscrossing New York and down to NYC, we have had and have a Silicon Alley of Media Arts communities. We are part of New York City's secret weapon. As part of that history, as you point out, is the continued use of legacy tools as well as new emerging systems. I am still using my 1987 digital video frame buffer. I am about to pull out the 1979 digital video frame buffer. I use the original recordings, transforming them with new capabilities.

GARTEL: The Art world has changed so much since we started with Digital Media. What do you think students of today need to know about the past?

Peer: I teach. I think about what the students need to know about New Media tools and histories all the time. One easy answer is that our contemporary culture needs to know and celebrate the fantastic histories of the New Media Arts of the last 120 years or so. They need to see and hear the work. When they do see and hear some of it, they get it. Contemporary young people obviously have a deep experience with media. I think it is fair to say that they have also been on

a fairly low nutrition diet regarding their media experience. When they see some of the great historical work they are energized and excited. The historical media arts work is a parallel universe. It takes a bit to become accustomed to it. Then, wow, watch out. One of the problems the initiated students have is that their friends might be dismissive of it, not liking what they don't understand. The process of shifting and adjusting is of course an educational process. One moment it is unfamiliar and the next it can be taken for granted in the sense of it being the understanding of a growing community, and at various moments it becomes part of our larger shared cultural mythologies, common sense, a rich part of being a citizen, of being a being.

GARTEL: Having asked that last question, how do you think students can reinvent in today's world?

Peer: Students reinventing in this world Yes, education is the process for re-invention. Boris Groys has a wonderful and strange metaphor for art education, although it would work across education in general possibly, that is that education creates a space in which we can become sick, can become confused, can become reinvented. We can take this experience with us after schooling. We have a set of antibodies allowing us to take on the new configurations of the emerging future. Once you have experienced ongoing problem solving and if you experience making things then you are set for stepping into the future. That is in fact a good mission for education, to provide and encourage the spaces for experimentation and problem solving. Those students who are lucky enough to have those kinds of experiences have a great chance for reinventing themselves. Recent and contemporary art practices are part of this kind of events and actions thinking.

GARTEL: What do mobile apps mean to Artists today, if everyone has access to them?

Peer: The near ubiquity of Mobil Apps is interesting. Emil Schult of Kraftwerk is committed now to making music with his cell phone solely using the large number of mobile apps available and coming. This is a curious creative part of our contemporary culture. There are also hundreds of software based electronic music systems available. We are also seeing a resurgence of new analog hardware based electronic music systems, with many manufacturers. Wow. What an interesting time. What it is showing is how significant and meaningful electronic arts tools are to the culture, from kids' learning toys, to philosophical toys, to instruments and tools for living and psychically growing. I have been studying Karlheinz Stockhausen, Tony Conrad and Pauline Oliveros recently. Put that together with mobile apps and what do you get?

.GARTEL: Of course I must ask you this question: How has your own personal work changed over time?

Peer: My own work has changed over time. I can now work in one form or another on media arts pieces very regularly. Access used to be such a problem. I am still using some of my early pieces in my new pieces. I am identifying digital systems that still allow me to work in real

performative time, therefore I can make pieces in a spirit and energy similar to how I was working many years ago. The software systems which I use, I often complain how in-elegant they are, poorly designed, though to be fair, they are getting better, they are evolving, so video and sound works can be score based, timeline structured, constructed as well as being real-time and intuitive. What we culturally have available to us now, we dreamed of having 30 or more years ago. There have been unplanned repercussions of the internet. At the same time music has been freed on the internet it has also wreaked havoc on the commercial potentials of making music and distributing music as well as moving image work. It needs to be figured out, retweaked, recalibrated, redefined so that information is broadly available and that media arts makers can be compensated for their labors. It can surely be better than what we have now. My goal with my own work was to focus on the making of the work. I was inspired by the idea of having a lifetime pro-active working, making a large body of work using new media. I still am solidly behind the idea.

Gartel: When we started so many years ago, few understood Digital Media. There were few places to show work. Now it is limitless. How do you quantify what's good in a sea of a lot of mediocrity?

It is true that there are so many more new venues for showing work than before. It feels overwhelming at times. Jean Baudrillard said we would come to a time where we would have the "ecstasy of communication". Maybe we now have the "ecstasy of entertainment" or the "ecstasy of the market" ... lots of ecstasies. And mediocrity... Well there has always been a large amount of mediocrity. Some of mediocrity is learning. One gets better. Social media thrives on participation. Participation is its own value. I don't think so much about mediocrity. Where I get interested is around ideas like, it is interesting? Is it generous? Does the work, the gesture move us forward in some meaningful way? I am skeptical about the military and entertainment complex. Getting meaningful and useful information is difficult. I do think of art as both an epistemological and ontological activity, that is being involved in the nature and limits of information and also being involved in the notion and richness of Being. Interestingly the linguistic shift of a number of year ago is now being replaced by an evolving "new materialism" shift that is looking again at the body and reconnecting and articulating with material realities including in the context of climate change and limited global resources. We are in a major moment of shift at the philosophical level. One reason being that we are dealing in fact with new survival challenges. We are needing again to rethink our thinking, about how we go about making our lives given our new media global world and also our local real lives and communities. Contemporary thinking and making is taking on our new situations. My question regarding much contemporary work is, is it interesting, engaging, useful, meaningful, empowering?

Gartel: Please show us what work you hold near and dear to you in your own personal archive. Kindly describe your sensibility with it.

Peer: What I hold dear in my own archive, wow, as I said I have a substantial library of books and music and media art work. They are my connection to worlds that I value and challenge me.

I am happy to own the materials. I do not mostly rent them or borrow them. I take them into my life and live with them. I have electronic tools I work and live with. I recently purchased the MacBook Air I am writing this with. I also use it in performances on the road. I traveled to the PUNKT Music Festival in Kristiansand, Norway to perform my video performance piece named "Hermes", using a Stratocaster guitar, EBow, MIDI, MacBook Air with variable articulated playback of 40 years of my video pieces. I am also using Vizzie together with Ableton Live for real time HD video image processing. I have made some recordings with it that are great. I am learning the system, including working it in 4 channel sound. I do have a large collection of video and audio tape recordings. I would say a significant sensibility of my work is a developed collaboration with various electronic systems and ideas. I capture durational dialogues in many cases in real time. Often they are lens, microphone and electronic combinations. The pieces are moving signal, image and sound worlds, actual physical and material realities as well as being slyly and unexpectedly laced with cultural stickiness. How they function and evolve in time, in old ways and new ways, what equivalences they may have to our thinking experience, these in my mind are materials of the new media reality. The haptic, the phatic, the declarative ... We do live in worlds/archives of moving images and sounds. I am witnessing these rich systems, dialoguing, recording along the way. Hollis Frampton years ago, provocatively stated that Cinema, new media at the time, was the most advanced media of all the medias because it could contain the codes of all the other medias. The idea is engaging. What is interesting about it is not the piece about the most advanced but the idea of a container for all the codes; painterly codes, theater, dance, photography, literature, text, voice, sound, etc. I am witnessing arrangements of these codes, these sets in electronic spaces and structures. One can't run out of ideas and experiences. I have many recordings as you might imagine. I am archiving pieces, transferring them to digital hard drive storage. Other than the digital prints I have been working on for many years, I love them, a good deal of the work is video and audio signals on video tape and now as digital files. In the mid 90's Andrew Deutch and I together with Pauline Oliveros established the "Carrier Band", which now includes a number of electronic performers such as Caspar Abocab, Rebekkah Palov and Don Metz. Carrier Band performances have recently taken place at the Burchfield Penny in Buffalo and at the Stone in NYC. A number of Carrier Band CDs are in distribution. Video, sound, digital prints, that is the work, the history; digital files, a piece of what was mentioned earlier ... the contemporary digital humanities.

GARTEL: There are few pioneers and many followers. - We can now say the entire world followed. What do you see as the future of the medium and the entire Art world as it stands now??

Peer:

There is always great fear that Art might be over, played out as in art is dead. It is probably good to say occasionally. Although it is not true. I very much like John Cage's response to questions of art being over. He said something to the effect that every night we go to sleep, tired. We wake in the morning with renewed energy. We have new energy. It is a new day and we want to make things. That's it. We also have a sense of what the world needs. The works are events responding to that. The art world is fractured as so much in the world is. The Market is a strong driver shaping our understanding and awareness of the world. I have always had mixed feelings about the Market. I do not consider it the main act. It may be on some level but I consider it to be

a necessary marginal. Education, philosophy and art are the being human makers. As robots and automation become more challenging to us, the more we will see the values our humanities, that is the compass. It sounds serious. I think it is. It also is a good time. I would like to think of my work as a good time. Nam June Paik, in a wonderful video interview with Steina and Woody Vasulka in their loft space, said that his contribution was to make television humorous, as a joke. At first I did not understand the value of that. Now , thinking of the smart power of DADA, I see the value of his thinking.

GARTEL: Tell us how Alfred is evolving?

How is Alfred, School of Art and Design, New York State College of Ceramics evolving? I would say it is alive and well. The art school as all art schools is reflecting on its mission and methods. Art schools have a particular history regarding language and meanings embedded in the visual art work. Media Arts, living in many worlds, such as popular culture as well as fine arts have a long history of language as part of the media event, language as one of the parameters. The School of Art and Design is also unusual with its connection to an engineering school as part of the New York State College of Ceramics. The College is a Statutory College of the New York State University system, administered by Alfred University. The other school with Statutory Colleges is Cornell University. The public private configuration is unique. The Mission of the New York College of Ceramics involves supporting new materials research for the benefit of citizens and companies of New York State. To be teaching New Media arts in that context is a challenge and an extremely exciting prospect. This Spring we celebrated, together with Harland, the opening of the Harland Snodgrass Gallery. Harland started video in the art school in 1971. By the end of the 70's he had built a Sandin Image processor, which we still have and use and a Dave Jones and Paul Davis Cromemco Z80 computer system for digital video experimentation. Now the students are making work with real-time HD video, multi-monitor display, 4K video, projection mapping, 3d with texture mapping, virtual reality and 4 and 6 channel sound. They also have a number of legacy video image processing devices: The Sandin, Jones and Fairlight. Maybe we should all go back to school.

GARTEL: Lastly, thank you for a lifetime dedicated to shaping minds young and old with your knowledge, understanding, and your gift of giving.

Peer: Lawrence, thank you so much for the opportunity to have this exchange with you. I very much appreciate your questions. Your questions so reveal your longtime serious efforts and care regarding the birth and evolution of the new media arts. Bravo to you!